MidAmerican Energy Company
Exhibit 1.4
Docket No. 03-_____

AFFIDAVIT OF JEFFREY GREIG

MidAmerican Energy Company
Exhibit 1.4
Docket No. 03-_____

STATE OF MISSOURI)
) ss.
COUNTY OF JACKSON)

AFFIDAVIT OF JEFFREY GREIG

I, Jeffrey Greig, of lawful age, being first duly sworn on oath, do hereby depose and state that I am the Manager of Project Development for Burns & McDonnell Engineering Company, and in that capacity, I have been retained by MidAmerican Energy Company ("MidAmerican") to independently assess the market price that MidAmerican would have paid to acquire a high efficiency 501F combustion turbine generator ("501F CTG unit") meeting the criteria of Appendix A attached to my affidavit for its Greater Des Moines Energy Center in July 2001 and the time of delivery if a contract for such a combustion turbine generator had been entered into at that time.

It is my understanding that MidAmerican Energy Holdings Company ("MEHC"), the corporate parent of MidAmerican, transferred to MidAmerican its contract for purchase of a 501F CTG unit. I was not provided with any information on the details of that transfer and was not provided with the details of the price or delivery schedule that resulted from that transfer.

I am qualified to render this opinion because, in my capacity as Manager of Project Development for Burns & McDonnell, I specialize in the strategic and commercial aspects of new gas-fired and coal-fired generation for utilities and independent power companies. I work with clients to help them purchase and install combustion turbine equipment in simple cycle and combined cycle plant applications. Additionally, I have worked on simple cycle and combined cycle plant projects when

Burns & McDonnell has been an independent engineer on behalf of an owner or lender. Burns & McDonnell was working on a number of projects going on during the summer of 2001 when MidAmerican took assignment of the 501F CFTG unit that provided me with information on the market for turbine generators and their delivery dates during that period.

I reviewed Burns & McDonnell project and contract files and related documentation involving F class combustion turbine activities during the summer of 2001. I also contacted equipment brokers to obtain independent data on pricing and delivery times for class F combustion turbines.

The results of my assessment are summarized in the attached letter that I prepared. I conclude in my letter that:

1. If MidAmerican had entered into a contract in July 2001 for a 501F CTG unit, the contract value would have been $38,000,000 to $39,000,000. In my letter, on Page 4, I list a number of factors in a contract that could have affected the value, but I conclude that inclusion of any or all of those elements would not have likely changed the contract value more than $1.5 million in either direction.
2. The earliest possible delivery time for units contracted for in July 2001 would have been at least 24 months into the future.
3. None of the independent brokers in the secondary market that I contacted had entered into transactions for a 501F CTG unit in the summer of 2001 – in other words, the unit would had to have been acquired by MidAmerican from a manufacturer. They indicated that summer 2001 was at or near the peak of the market.

4. The experience of Burns & McDonnell was that in the summer of 2001, F class combustion turbine generators were only available from manufacturers with delivery times extending beyond 24 months, because there was such high demand for the units at that time.

Further the Affiant sayeth not.

Jeffrey Greig

SUBSCRIBED AND SWORN TO before me this 28th day of March, 2003

Notary Public in and for the State of Missouri

K.L. WYATT, Notary Public
Notary Seal, State of Missouri
Commissioned in Jackson County
My Commission Expires Oct. 30, 2006

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ATTACHED LETTER

TO

AFFIDAVIT OF JEFFREY GREIG

Burns & McDonnell
SINCE 1898

March 28, 2003

Mr. Dean Crist
V. P. Regulatory Projects
MidAmerican Energy Company
666 Grand Avenue
P.O. Box 657
Des Moines, Iowa 50303

Combustion Turbine Valuation
Seimens Westinghouse Power Corporation 501F
B&McD Project 31780

Dear Mr. Crist:

Burns & McDonnell (B&McD) has been retained by MidAmerican Energy Corporation (MEC) to provide an independent assessment of the contract value and delivery schedule for a high-efficiency 501F combustion turbine-generator (501F CTG) manufactured by Siemens Westinghouse Power Corporation (SWPC). The timeframe for the assessment is reflective of market conditions in July 2001.

BACKGROUND

MidAmerican Energy Holdings Company secured two (2) 501F CTG units in May 2000 for installation at a combined cycle facility development. In July 2001, these 501F CTG units were transferred to MEC for installation at the Greater Des Moines Energy Center, a combined cycle facility currently under construction near Des Moines, Iowa. MEC has requested that B&McD provide an independent assessment of the contract cost of equal or similar equipment in the marketplace as of July 2001, and an estimate of delivery timeframes for this equipment at the time.

B&McD has not been provided the actual contract value and delivery schedule for the two (2) 501F CTG units secured by MEC, and this assessment represents our independent opinion of contract value and delivery schedule during the July 2001 timeframe.

EQUIPMENT SCOPE OF SUPPLY

Appendix A presents the basic scope of supply for the 501F CTG equipment contract. The 501F CTG units represent standard high-efficiency combustion turbines utilizing "F" class technology offered by SWPC. The 501F CTG units are natural gas-fired only, equipped with dry low NO_x combustors, and include totally enclosed water to air-cooled (TEWAC) generators.

Appendix B includes a list of optional equipment and services available for the 501F CTG units. The following options were exercised by MEC and are included in the contract value assessment outlined herein:

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Kansas City, Missouri 64114-3319
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Fax: 816 333-3690
http://www.burnsmcd.com

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Item	Description
3	Transportation to the Site
10	Upgrade Inlet Filter House
11	3X C800 Current Transformers
12	Redundant DPU's
13	Redundant Serial Links
14	Power System Stabilizer
15	Remote Control Stations
16	Spare I/O Points for Future Alarm/Status Assignments
18	Isolation Valves on Pressure Instruments
19	Gas Monitor in CT Enclosure
20	Lube Oil Drain Thermocouples
21	VAR-hour Meter
22	87T G50 Relay Differential
23	Out of Step, 78 Relay
24	Control Panel Modification
25	On-Site Training
27	Off-Site Control System Maintenance Training

As indicated, the basis of the contract value assessment outlined herein is the standard 501F CTG unit equipment contract plus the options listed above.

METHODOLOGY

B&McD has provided equipment procurement assistance to a number of utility and independent power clients in the last several years for the purchase and installation of combustion turbine equipment in simple cycle and combined cycle power plant applications. In addition, B&McD has served as an Owner's Engineer or Independent Engineer to project lenders to assist with review and oversight of simple cycle and combined cycle plant design and construction. In these capacities, B&McD has reviewed and evaluated the purchase terms and pricing conditions for high-efficiency combustion turbine-generators including the SWPC 501F and a similar combustion turbine manufactured by General Electric (GE), the GE 7FA.

In preparation of this independent assessment, B&McD has reviewed our project and contract files for information on F class combustion turbine equipment purchases and negotiations during the summer of 2001, internal cost estimates for projects under development during 2001, and supplemental information based on our experience in that timeframe with the cost and schedule delivery for combustion turbine equipment.

We are unable to provide specific contractual terms and conditions from other projects and clients due to confidentiality restrictions on disclosure of financial information, but the assessment represents a compilation of information from the sources above.

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COST ASSESSMENT
In July 2001, B&McD estimates that the cost of a SWPC 501F combustion turbine-generator, plus the optional equipment identified above, would have a contract value of $38.0 - $39.0 million if purchased directly from SWPC at that time. Factors influencing a specific contract price and negotiations would include the following:

- Number of units purchased
- Prior equipment purchase history and relationship with Siemens and/or Westinghouse
- Terms and conditions of a concurrent Long-Term Service Agreement (LTSA) and spare parts purchase agreement
- Purchase of other power plant equipment (ie, steam turbine-generator, transformers, etc) from SWPC
- Payment terms and conditions
- Delivery schedule
- Purchaser credit quality

In the cost assessment, no special consideration (discount or premium) was incorporated for the above factors. Based on our experience, the likely pricing impact of any or all of the above factors may change a specific contract pricing by plus/minus $1.5 million.

SCHEDULE ASSESSMENT
In July 2001, B&McD estimates that the earliest possible delivery of a 501F combustion turbine-generator would have been a minimum of 24 months if purchased directly from SWPC at that time. As indicated above, schedule acceleration would have been possible only by incurring additional cost.

EQUIPMENT BROKERS
In addition to reviewing our internal information and experience, B&McD contacted equipment brokers listed in Appendix C to obtain further independent data on pricing and schedule delivery for F class technology combustion turbines. Each of the brokers in Appendix C was contacted, and B&McD inquired if the brokers had inventory records for pricing of SWPC 501F or the GE 7FA from the summer of 2001. None of the brokers were able to provide independent documentation from their own transactions during that time period. Several of the brokers specifically cited the fact that the summer of 2001 was at or near the peak of the combustion turbine equipment market, and F class technology units were not available on the secondary market. This position is consistent with B&McD's experience that F class technology combustion turbines were only available from the manufacturers, and delivery times were extended to beyond 24 months due to the high demand for these type of units during the summer of 2001.

If you need any additional information, please contact me at (816) 822-3392 or e-mail jgreig@burnsmcd.com. It is a pleasure to be of service to MEC in this matter.

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Sincerely,

BURNS & McDONNELL

Jeff Greig
Manager, Project Development

cc: Greg Gould, Associate Vice President
Project File

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Appendix A
Scope of Supply & Division of Responsibility

MidAmerican Energy Holdings Company
Cordova #2 - Two 501F Combined Cycle EconoPacs

Scope of Supply & Division of Responsibility

TABLE OF CONTENTS

MidAmerican Cordova 2 - 501F Combined Cycle EconoPacs
Scope of Supply & Division of Responsibility

ITEM	DESCRIPTION	Quantity	Design	Supply	Erection	REMARKS
	501F ECONOPAC - DRY LOW NOx COMBUSTOR SINGLE FUEL NATURAL GAS TOTALLY ENCLOSED WATER TO AIR COOLED GENERATOR (TEWAC)					
I.	**COMBUSTION TURBINE PACKAGE**	2	W	W	P	Wind design ASCE 7-95 110 mph, Category III, Exposure C, I=1.15 Topographical factor K2T=1.0 Seismic design: ASCE 7-95, Category III, Aa=0.15, Av=0.15, Soil Profile Type D Ground Snow Loading Pg=30 psf Minimum (Ce=1.0, I=1.10) 90 dB(A) Average Near Field Noise Level
	Engine Assembly					
	Inlet Manifold					
	Exhaust Manifold					
	Insulation Blankets					
	Exhaust Bearing Tunnel, Fire Protection					Dry chemical
	Thermal Detector					
	Dry Chemical Storage					Located outside of turbine enclosure
	Manual Pull Stations					Located on exhaust end of CT enclosure at exits
	Turbine-Generator Coupling Cover					
	Combustor Bypass Valves					
II.	**GENERATOR PACKAGE**	2	W	W	P	60 Hz, 18 kV, 3 Phase, 0.9 power factor lagging/0.95 leading Stator class F insulation system Rotor class F insulation system Class F temperature rise
	Totally Enclosed Water to Air Cooled Generator (TEWAC)					
	Lineside Current Transformer					Mounted inside generator enclosure, C400 accuracy
	Air Cooler Assembly					Designed for a maximum 104°F closed loop cooling water. Operation at 66% rated Kva with one cooler section out of service.
	Static Excitation Equipment					
	Power Excitation Equipment					
	Power Electronics					
	Automatic Voltage Regulator					
	Enclosure					
	DC Bus					
	Collector Assembly					
	Neutral Tie Enclosure					
	Current Transformer					
	Neutral Tie					
	Grounding Transformer					
	Secondary Resistor					

W = Siemens Westinghouse
P = Purchaser

MidAmerican Cordova 2 - 501F Combined Cycle EconoPacs
Scope of Supply & Division of Responsibility

ITEM	DESCRIPTION	Quantity	Design	Supply	Erection	REMARKS
	Voltage Transformer/Surge Cubicle					Supplied loose and unmounted
	Voltage Transformers					
	Surge Arresters					
	Surge Capacitors					
III.	WALK-IN TURBINE ENCLOSURE	2	W	W	P	Outdoor
	Enclosure Ventilation System					
	Standard Lighting					120 V AC
	Emergency Lighting					Self-contained, 12 V DC
	Fire Protection System					High Pressure CO_2 with alarm and strobe
	Thermal Detectors					
	Manual Pull Stations					One at each exit
	High Pressure CO_2 Storage					Bottles or spheres
	Alarm Horn					
	Combustible Gas Sensors					
IV.	MECHANICAL PACKAGE	2	W	W	P	
	Bedplate					
	Enclosure					
	Heating/Ventilation					
	Standard Lighting					120 V AC
	Emergency Lighting					Self-contained, 12 V DC
	Pressure Switch & Gage Cabinet (PS&G)					
	Air Compressor for Pneumatic System					
	Lube Oil System					
	Main Lube Oil Pump (AC)					
	Emergency Lube Oil Pump (DC) with Starter					
	Auxiliary L.O. Pump (AC)					
	Bearing Pressure Regulating Valve					
	Lube Oil Temp Control Valve					
	Vapor Extractor/Mist Eliminator					
	Lube Oil Immersion Heater					
	Lube Oil Filter					Dual full capacity filters with transfer valve
	Accumulators					
	Lube Oil Reservoir					Carbon steel with oil resistant aluminum paint
	Fire Protection System					High Pressure CO_2
	Thermal Detectors					
	Manual Pull Stations					One at each exit
	High Pressure CO_2 Storage					Bottles or spheres
	Alarm Horn					
V.	ELECTRICAL/CONTROL PACKAGE	2	W	W	P	
	Bedplate					
	Removable Floorplate Assembly					
	Enclosure					
	Motor Control Center, AC					

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MidAmerican Cordova 2 - 501F Combined Cycle EconoPacs
Scope of Supply & Division of Responsibility

ITEM	DESCRIPTION	Quantity	Design	Supply	Erection	REMARKS
	Motor Control Center, DC					
	CT Gen. Protective Relay Panel					Includes meters and automatic synchronizer.
	DC Power System					125 V DC
	DC Panelboard					
	Batteries/Rack					Lead calcium; in isolated compartment
	Battery Charger					
	Microprocessor Based Digital Control System:					Includes non-redundant DPU. Interfacing into a plant control system is not included.
	Control Function DPU					Includes non-redundant DPU. Interfacing with Plant Control System is not included.
	Sequence Function					
	Dry Low NOx Function DPU					
	Alarm Function					
	Temperature Monitoring Function					
	Vibration Monitoring System					Bentley Nevada 3300. Dual probe x-y sensors on each journal bearing.
	Power Supplies					Redundant
	Local Equipment Panel					
	Data Logger & Sequence Of Events					16 point SOE
	Air Conditioner					2 Per Electrical Package
	Standard Lighting					120 V AC
	Emergency Lighting					Self Contained, 12 V DC
	Fire Protection System					High Pressure CO_2 with outdoor alarm and strobe
	Thermal Detectors					
	Smoke Detectors					
	Manual Pull Stations					One at each exit
	High Pressure CO_2 Storage					Bottles or spheres
	Alarm Horn					
	Control Panel					Monitors detection systems, initiates discharge of agent, and controls alarms
VI.	FUEL GAS SYSTEM	2	W	W	P	Purchaser to supply fuel gas at required pressure. Fuel gas must meet (W) Gas Fuel Spec 21T0306.
	Pilot Throttle Valve					
	Stage A, B and C Throttle Valves					
	Overspeed Trip Valve					
	Vent Valves					
	Final Filter/Separator					Main plant filter separator units by Others
	Starting Pressure Regulating Valve					
	Instrumentation Panel					
	Main Pressure Control Valve					
	Fuel Gas Metering Run					One per CT with transmitters
	Plant Fuel Gas Knockout Drum	2	P	P	P	
	Plant Fuel Gas Filter/Separator					
	Fuel Gas Totalizing Meter					For gas billing

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MidAmerican Cordova 2 - 501F Combined Cycle EconoPacs
Scope of Supply & Division of Responsibility

ITEM	DESCRIPTION	Quantity	Design	Supply	Erection	REMARKS
	(OPTION) Fuel Gas Heater and Knockout Drum					Mail fuel gas supply shall be heated to 280°F by Purchaser; Pilot fuel gas shall be unheated
VII.	STARTING PACKAGE	2	W	W	P	
	Bedplate					
	Enclosure					
	Starting Motor (AC Electric Motor)					4000 Volt motor
	Turning Gear & Clutch Assembly					DC motor
	Starting Clutch					
	Torque Converter					
	Charging Pump (Shaft Driven)					
	Magnetic Speed Pick-up					
VIII.	PRE ENGINEERED PIPE RACK AND INTERCONNECTING PIPING	2	W	W	P	
	Cooling Air Piping					
	Lube Oil Supply and Drain Piping					Stainless steel supply piping downstream of filters. Balance of lube oil piping - carbon steel. (OPTION) Sight flow glasses and thermocouples on lube oil drains.
	Compressor Water Wash Piping					Within enclosure
	Fuel Gas Piping					Within enclosure, includes stainless steel piping, flanges, fittings and stainless steel trim on carbon steel valve bodies
	Compressor Bleed Piping					
	HP Compressor Bleed Valve					
	LP Compressor Bleed Valve					
	Control Oil Piping					
	Fire Protection Piping					
	Waste Drain Piping					
	Pressure Switch & Gage Tubing					Isolation valves are added except where they might disable the turbine protective trip system.
	Pipe rack and pipe supports					
	Pipe Insulation & Lagging					
	Evaporative Cooler Water Supply Piping					
IX.	TURBINE & GENERATOR ACCESSORY EQUIPMENT	2	W	W	P	
	Equipment access platforms and ladders					
	Rotor Air Cooler (Air to Air)					1 x 100% fan, 106°F maximum ambient
	Turbine Lube Oil Cooler					2 x 100% stainless steel plate type cooler suitable for maximum cooling water at 104°F
	CT Exhaust Expansion Joint					
	Exhaust Transition					Round to Square Transition. Square to rectangular transition by HRSG supplier.
	Exhaust Stack and Silencer		P	P	P	

MidAmerican Cordova 2 - 501F Combined Cycle EconoPacs
Scope of Supply & Division of Responsibility

ITEM	DESCRIPTION	Quantity	Design	Supply	Erection	REMARKS
	Turbine Inlet Filter	2	W	W		Pulse, self cleaning with bird screens. Plant air compressor to provide pulse air for cleaning.
	Evaporative Cooler					85% efficient, including sump and pump; Purchaser to supply potable quality water supply.
	Inlet Duct and Silencer Assembly					Standard side inlet design with stainless steel trash screen and acoustical lagging. Silencer support material to be stainless steel. Duct liner to be galvanized steel.
	Control Oil System					
	Fuel Reservoir					
	Redundant Motor Driven Pumps					2 AC motors
	Redundant Filters					
	Fluid Polishing Unit					
	Cooler					Water cooled with cooling water up to 104°F
	Foundation Leveling Wedges					
	Foundation Bolts		W	P	P	
	Compressor Water Wash Skid		W	W	P	
	Water Wash Pump					
	Detergent Tank					
X.	POWER ELECTRICS		P	P	P	
	Medium Voltage Motor Controller					For electric motor starting package; design must be coordinated with Supplier.
	Generator Isolated Phase Bus Assembly					From line side cubicle to Purchaser supplied equipment
	Starting Motor Transformer					4160 V Secondary
	Aux. Transformer					480 V Secondary
	Generator Breaker					
	Generator Step Up Transformer					
XI.	ELECTRICAL INTERCONNECTING MATERIAL					
	Cable and Conduit within Supplier Supplied Packages/Skids		W	W	-	Control, instrumentation and power; pre-wired
	Cable between Supplier Supplied Packages/Skids/ Enclosures, excluding Power Electrics		W	P	P	Control, instrumentation and low voltage power
	Above Grade Conduit System between Supplier Supplied Packages, excluding Power Electrics					
	Cable, Conduit, and Trays for Power Electrics		P	P	P	All medium voltage power from source to motor terminal
	Cable, Conduit and Trays for Power Electrics					Control, instrumentation, and low voltage power
	Underground Conduit					Stub-up locations by Supplier
XII.	TOOLS & MAINTENANCE EQUIPMENT					
	Start-up Equipment Package:	2	W	W	-	One set per CT.
	Fuel, Control & Lube Oil Filter Cartridges					

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MidAmerican Cordova 2 - 501F Combined Cycle EconoPacs
Scope of Supply & Division of Responsibility

ITEM	DESCRIPTION	Quantity	Design	Supply	Erection	REMARKS
	Air Filter Spare Cartridges (2%)					
	Spare Plugs (1) & Cable					
	Cross Flame Tube (1)					
	Scanner Flame Detector (1)					
	Thermocouple Elements (15)					
	Vibration Probe					
	Misc. Nuts, Bolts, Fittings and Balancing Plug					
	Maintenance Tools Package:	2	W	W	-	
	Exhaust End - Guide Spindle (1)					
	Exhaust Bearing Removal Tool (1)					
	Inlet Bearing Removal Tool (1)					
	Blade Ring Removal Assembly (1)					
	Combustion Transition Alignment Tool					
	Guide Bolt (Compressor Cylinder) (4)					
	Guide Stud – Turbine Cylinder					
	Guide Stud – Blade Ring (2)					
	Bolt Heaters					
	Bolt Stretch Measuring Rods & Sleeves					
	Pyle National Connector special Tools					
	Guide Stud – Exhaust Cylinder					
	Guide Stud - Torque Tube					
	Sleeve - Balance Plug Guide (1)					
	Balance Plug Tool (Combustor Spindle) (1)					
	Balance Plug Tool (Inlet Assembly) (1)					
	Pipe (Fab) (1)					
	Spring Compressor - Variable Vane (1)					
	Misc. Tools, Nuts & Bolts					
	Lifting Beam Assembly					
	Rotor Threading Equipment					
	Fuel Nozzle Maintenance Kit					
	Transition Alignment Tool					
XIII.	CIVIL WORK		P	P	P	
	Site Survey					
	Sub-Soil Investigation					
	Site Leveling					
	Excavation for Foundations, Pipes, Roads, Cabling & Grounding Grid					
	Backfill					
	Finish Grading					
	Foundations for all Equipment					
	Surface Drainage to & including any Collection Pond					
	Sanitary Waste Disposal					
	Cathodic Protection					If required
	Below Grade Electrical Raceway					Includes Conduit, Duct Bank, Trenches, etc.

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MidAmerican Cordova 2 - 501F Combined Cycle EconoPacs
Scope of Supply & Division of Responsibility

ITEM	DESCRIPTION	Quantity	Design	Supply	Erection	REMARKS
XIV.	ADDITIONAL PLANT ITEMS		P	P	P	As required
	Service Piping Systems:					
	Fuel Gas					To fuel gas piping assembly at turbine enclosure
	Fuel Gas Metering					
	Instrument Air					
	Service Air					
	Raw Water					
	Demineralized Water					
	Vents					
	Drains					
	Potable Water					
	BOP Motor Control Centers					For Purchaser supplied systems
	Demineralizer System and Local Control Panels					
	Instrument & Service Air Systems and Control Panels					
	BOP and Plant Fire Protection Systems-Hydrants Panels and Extinguishers					
	Demineralized, Potable, Raw and Fire Water Storage					As required
	Plant Lighting					
	Gauges, Controls and Panels					For Purchaser supplied systems
	Intra-communication System					
	Cable, Conduit and Tray Systems					Between Purchaser-supplied equipment. Also between Purchaser-supplied equipment and Westinghouse supplied equipment.
	Electrical Consumables					Tie-wraps, tape, misc. bolts, nuts, washers, unistrut clamps and related bolts and nuts.
XV.	OTHER SERVICES					
A.	Plant Engineering			P		
B.1	Transportation to site			P		Equipment quoted FOB manufacturing plant. Supplier can provide optional pricing for transporting equipment to nearest rail siding for train shipments and to site for normal truck shipments.
B.2	Complete Off Loading, Heavy Hauling, Storage, Erection and Installation of all Westinghouse Supplied Equipment and Material			P		
C.	Provision of Field Office Furnished with Electricity, Drinking & Sanitary Water, Desks, Chairs, Lockers & others which are necessary for Field Works, Services & Sanitary Facilities for Office Personnel			W		For Supplier Field Representative

MidAmerican Cordova 2 - 501F Combined Cycle EconoPacs
Scope of Supply & Division of Responsibility

ITEM	DESCRIPTION	Quantity	Design	Supply	Erection	REMARKS
D.	Provision of First Aid & Medical Services - OSHA Approved			P		
E.	Provisions of Local Communication Facilities including Radio, Telephone, Cable & Telex, if possible			P		
F.	Provision and Distribution of Electric Power for Lighting, Heating and others required			P		
G.	Water Facility for Drinking, Sanitary & other required			P		
H.	Maintaining & Guarding all Facilities Equipment & Materials			P		
I.	Mobile Crane(s)			P		
J.	Technical Field Assistance for Installation, Start-up and Check-up			P		Required for Supplier to accept Provisional Acceptance LDs.
K.	Site Organization					
	Resident Field Construction Manager			P		
	Supervision & Manpower for Erection Works & Commissioning			P		
	Technical Field Assistance Engineer			P		Required for Provisional Acceptance
	Test Operation & Trial Operation			P		Required for Provisional Acceptance
	Plant Start-up Engineering			P		Required for Provisional Acceptance
	Plant Operators			P		
L.	Overall Progress & Construction Schedule; overall Planning, Coordination & Schedule Control			P		
M.	Worker's Compensation, Employer's Liability, or any other Local Insurance Required			W		For Supplier provided services
N.	Permanent Facility Permits and Licensing			P		Licensing support available from Supplier on a per diem basis
O.	Consumable Material for Erection Works: Flushing Oil, Oxygen, Acetylene, Propane, & Argon Gas with Cylinder for Welding & Annealing, as required			P		
P.	First Fill Material, Oils, Greases, Etc.			P		

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MidAmerican Cordova 2 - 501F Combined Cycle EconoPacs
Scope of Supply & Division of Responsibility

ITEM	DESCRIPTION	Quantity	Design	Supply	Erection	REMARKS
Q.	Finish & Touch up Paint & Painting for all Equipment			P		Supplier equipment is supplied primed per Siemens Westinghouse Spec 21T6847.
R.	Instruction Manuals and Plant Documentation			W		6 Copies and 6 CD-ROMs in English (Supplier to integrate and issue)
S.	Long Term Operation & Maintenance Programs			P		Available as an option
T.	Training					Available as an option
	CT Familiarization			P		
	CT Operation and Maintenance Considerations			P		
	Basic Power Plant Control Room Simulator			P		
U.	Construction Equipment, Tools & Aids including the following: Cement Mixers, Loaders, Trucks, Cranes of varying capacities, Trenchers, Pipe Wrapping & Laying Equipment, Power Generators, Air Compressors, Welders, Drilling Equipment, Pipe Working Facilities & all Hand Tools required for expeditiously and competently completing all phases of the work under the Contract			P		
V.	Thermal Performance Testing			W		Performance test supervision on the CTG only
W.	Emission and Acoustics Testing			P		Available as an option
X.	All Risk Builder's Risk Insurance			P		
Y.	Construction Permits			P		
Z.	Temporary Construction Power			P		
AA.	Construction Water			P		
BB.	Fire Water			P		
CC.	Access Road(s)			P		
DD.	Temporary Construction Staging Area			P		

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Appendix B
List of Exercisable Options

MidAmerican Energy Holdings Company - Cordova #2

List of Exercisable Options

Item	Description
1	Warranty Extension so that the Warranty Period would expire the earliest of 18 months from Substantial Completion, 30 months from delivery or 12,000 total equivalent operating hours. Reference Article 25 of General Conditions.
2	Warranty Extension so that the Warranty Period would expire the earliest of 24 months from Substantial Completion, 36 months from delivery or 16,000 total equivalent operating hours. Reference Article 25 of General Conditions.
3	Transportation to the site
4	Steam injection for power augmentation (SIPA), The SIPA system augments the CT output by injecting steam directly into the combustor shell area, rather than a secondary combustor basket nozzle as SWPC typically use for steam injection for NOx control. The system is designed to take super-heated steam from the customers connection. The system consists of four major components. 1) Piping and valve assembly which controlls the steam flow into the combustion turbine. 2) Steam Injection Manifold which connects the piping and valve assembly with "Salt Shaker" nozzle. 3) "Salt Shaker" nozzles mounted into the combustor shell. 4) S.I. Meter Tube This is located outside the turbine enclosure and installed in the customers steam supply piping. If this option is exercised the Thermal Performance and Emissions Guarantees will need to be reevaluated and the drawing on the Acoustical Guarantee may need to be revised.

5	Glycol heating coils in the inlet house to raise the air temperature from -28°F to -20°F using Customer's heated glycol for coils in inlet house. SWPC supplies heating coils, consisting of 304 stainless steel tubes with copper tin coated fins, coil casing is SS 304. The heating coils are factory installed in the inlet filterhouse. Single point connection will be located within 36 in. of the inlet filter house. (Glycol heat exhanger, Steam for the glycol heat exchanger as well as the pumps, piping and glycol by Customer.) The heating coils adds an extra pressure loss to the CT- inlet system which will impact on the CT performance. If this option is exercised the Thermal Performance and Emissions Guarantees will need to be reevaluated and the drawing on the Acoustical Guarantee may need to be revised.
6	Standard TEWAC Generator Glycol cooling system and piping. This generator glycol cooling system is used when plant cooling water is not available. The system consists of the Glycol-to-air heat exchanger, 2x100% water pumps, expansion tank, and supporting piping, valving and instruments. The cooler assembly has three 33.3% capacity fans. Drains are provided for the low points of the cooler. The design of a glycol cooler may impose output restrictions and limit operation to only 0.90 power factor on hot days due to the slightly lower heat transfer capability as compared to using the plant water system. If this option is exercised the Thermal Performance and Emissions Guarantees will need to be reevaluated and the drawing on the Acoustical Guarantee may need to be revised.
7	Supplier's standard design kettle boiler in lieu of Fin-Fan rotor air cooler. Shell and tube type steam generator with rotor air on the tube side and feedwater/steam on the shell side. The primary purpose is to cool combustion turbine extraction air to provide a cooling medium for the CT hot parts. The secondary purpose is to generate saturated low pressure steam in paralell with the LP drum of the HRSG. The kettle boiler will be supplied including support structure from foundation upwards (exluding foundation). Purchaser is responsible for all water and steam side (shell side) piping, instrumentation, controls and valves. If this option is exercised the Thermal Performance and Emissions Guarantees will need to be reevaluated and the drawing on the Acoustical Guarantee may need to be revised.
8	Supplier's standard design fuel Gas heating to 280°F, including Fuel gas heater, Fuel gas heater knockout drum, and Fuel gas heater bypass & isolation valves. This standard design is based upon 100,000 lbs/hr of IP feedwater at 315F temperature. Condensate and interconnecting piping by Owner.

9	Dedicated air compressor for pulse filters. The electrical load will not be included in the Unit auxiliary loads for calculation of net CT power.
10	Upgrade to SWPC standard overhead mounted inlet filter house with inlet duct with support steel structure. This will be an outdoor overhead configuration supported off structural steel. The major reason for using the overhead design is when space is limited on site. Silencer baffles shall be provided within the horizontal ductwork, and with empty ductwork reserved for future silencer baffle retrofit. The overhead mounted inlet filter house adds an extra pressure loss to the CT- inlet system which will impact CT performance. For further information please see GA drawing NO D7170302 item 23. If this option is exercised the Thermal Performance and Emissions Guarantees will need to be reevaluated and the drawing on the Acoustical Guarantee may need to be revised.
11	3X C800 current transformers (generator neutral terminals) for customer overall differential relaying.
12	Redundant DPU's
13	Redundant serial links between control system & plant DCS to allow up to 260 signals using a Modbus protocol.
14	Power system stabilizer
15	Remote control stations (one compact unit with engineering capability and one without) for location within a central control room. These will be in addition to one full operator workstation placed in each PCC.
16	Spare I/O points for future alarm / status assignments.
17	Hard wired I/O signals for Owner RTU for status and or on/off control.
18	Isolation valves on pressure instruments
19	Gas monitor in CT enclosure and alarm
20	Lube oil drain thermocouples and sight glasses
21	VARhour meter
22	87T G50 Differential Relay - (1) Schweitzer Multifunction SEL 587 Transformer Differential Relay with 86 Relay.
23	Out of Step, 78 Relay - Settings by Purchaser.
24	Control Panel per 2.1.27.2 of CT Tech Spec, the control panel shall have provisions to disarm and lock out the suppression system for each compartment. (Fire Protection System)
25	On-site training
26	Off site control simulator training
27	Off site control system maintenance training

Appendix C
Equipment Brokers

EQUIPMENT BROKERS

Continental Power Machinery 34 Woodbine Rd. New City, NY 10956 (845) 638-0385	International Power Machinery 50 Public Square Terminal Tower, Suite 834 Cleveland, OH 44113 (216) 621-9514	Buy & Sell Show Room Cadena Imports Inc. Box 48 Site 3 RR2 Rocky Mtn. House Alberta, Canada T4T 2A2 (403) 844-3006
Hittle Power Technologies, Inc. 26970 W 107th Street Olathe, KS 66061 (913) 390-5225	Spare-Exchange PO Box 251 Vermont, Victoria 3133 Australia Ph: +61-3-9874 2533 Fax: +61-3-9874 2588	CFAS Enterprises Inc. Scott Condell, President 81-11 Langdale St New Hyde Park, NY 11040 Ph. or Fax: (718) 347-8055